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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,078	03/20/2004	Anton Filikov		7902

7590 01/19/2006

Anton Filikov
55 Pitman Ave.
Wakefield, MA 01880

EXAMINER

TSAI, CAROL S W

ART UNIT	PAPER NUMBER
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2857

DATE MAILED: 01/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/805,078

Applicant(s)

FILIKOV, ANTON

Examiner

Carol S. Tsai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/20/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed March 20, 2004 fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

Allowable Subject Matter

2. Claim 1-3 are allowed.

3. The following is a statement of reasons for the indication of allowable subject matter:

U. S. Patent No. 6,957,151 to Cheng et al. is the reference closest to the claimed invention. Cheng et al. disclose a method for solubility prediction comprising: selecting a first plurality of descriptors comprising identifiable compound properties and characteristics; forming a correlated descriptor subset from the first plurality of descriptors wherein the correlated descriptor subset comprises selected descriptors

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identified by correlation analysis; generating a solubility prediction function comprising selected descriptors from the correlated descriptor subset identified by statistical analysis of the correlated descriptor subset using a training data set; and applying the solubility prediction function to predict a compound's solubility on the basis of descriptor information for the compound. However, Cheng et al. do not teach a method of predicting solubility of a chemical compound comprising the steps of: a. identifying an electronically stored library of chemical molecules; b. building a computational model of a solid state of a molecule from said library by assembling a cluster of three or more copies of said molecule using a molecular mechanics method; c. computing energy, packing and interaction parameters from said model; d. computing other descriptors useful for predicting solubility of said molecule; e. repeating steps (b), (c) and (d) for every molecule from said library; f. building a solubility model using a quantitative method, which uses the parameters and descriptors computed in steps (c), (d) and (e); g. repeating steps (b), (c) and (d) for said compound; h. computing predicted solubility of said compound using said model and parameters and descriptors computed for said compound in steps (c), (d) and (e); and including all of the other limitations in the respective independent claims.

Conclusion

4. This application is in condition for allowance except for the following formal matters:

Objection to Information Disclosure Statement.

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Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lee et al. disclose methods for reliably detecting the presence of proteins, including proteins with various post-translational modifications (phosphorylation, glycosylation, methylation, acetylation, etc.) in a sample by the use of one or more capture agents that recognize and interact with recognition sequences uniquely characteristic of a protein or a set of proteins (Proteome Epitope Tags, or PETs) in the sample.

Bajorath et al. disclose a system and method for identifying a small group of compounds representative of a larger set of compounds.

Chen discloses a method and apparatus for automated detection of possible protein and nucleic acid targets of a given drug.

Lewis et al. disclose chemical sensors for detecting the activity of a molecule or analyte of interest.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol S. W. Tsai whose telephone number is (571) 272-


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2224. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571) 272-2216. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

cswt
January 13, 2006
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CAROL S.W. TSAI
PRIMARY EXAMINER